



Run-6 Status

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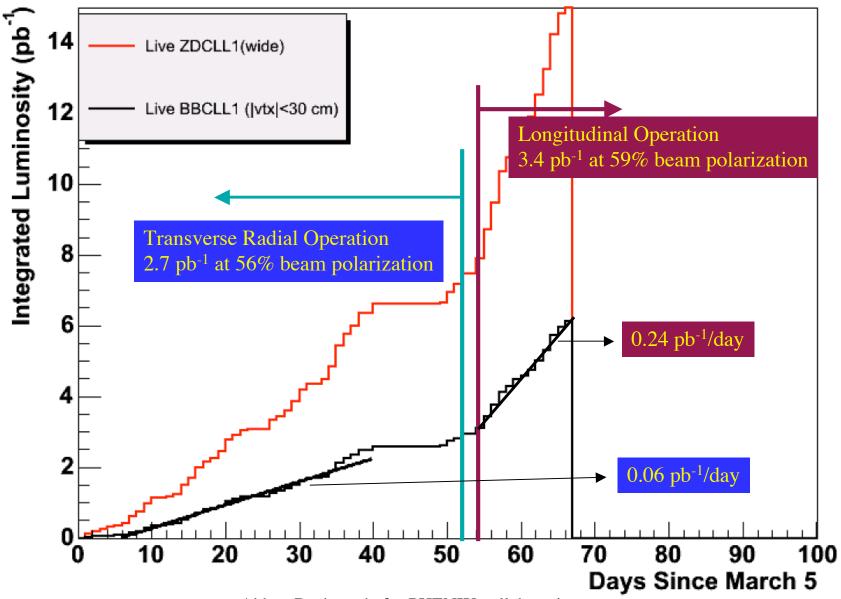
Time and Scheduling Meetings May 9, 2006







Progress so far...





Accumulations....

- So far: (200 GeV CM longitudinal collisions)
 - -3.4 pb-1 at 59%: $P^4L = 0.41$
 - To put it in perspective: Compare to Run-5 $P^4L = 0.16$
 - Data taking rate 0.24 pb⁻¹/day; early run was 0.06 pb⁻¹/day
 - We already have 2.7 pb⁻¹ at 56% polarization radial data set

• Aspirations:

- − Can expect to achieve ~9 pb⁻¹ at ~60% polarization this run!
- A wonderful input for physics outcome at 200 GeV
- 22 GeV CM test + operations(?)
- 62.4 GeV CM ~2 weeks
- 500 GeV machine development and whatever data we can record



How close to 62.4 GeV CM?

Answer

+/- 0.1 GeV, and no more for the comparison data set

Why so close?

- For R_{AA} measurements, we want to compare cross sections of AA-pp collisions at the same p_T and same CM
- The cross sections fall typically like $p_T^{\sim 10}$, as such a small difference in CM can introduce large systematic errors in the ratio.
- +/- 0.1 GeV in CM will introduce ~2% uncertainty which we believe is acceptable for this measurement



Sequence of Operations

For PHENIX both 62.4 GeV CM [HI and Spin] and 500 GeV Machine Commissioning [future Spin] are Important

- Generally a good idea to have data in the bag first! With this guiding principle: 62.4 GeV data set before 500 GeV machine commissioning
- Early 500 GeV: as a result of the reality that CA conference to interfere with 500 GeV machine development at the end?
 - Cons:
 - Main Concern: Heat/humidity might result in more interruption in the later 62.4 GeV data accumulations
 - Exp/DAQ stop for 5-6 days? Expect problems with re-startup
 - **Pros:** If 500 GeV machine study ends early:
 - Can we expect a data taking period for 22 GeV based on the earlier test?
 - Can expect to run longer (to the end) flat out at 62.4 GeV CM